

# Updating Shoreline Master Programs

Local/state cooperative development of  
**Phase 1: Shoreline Characterizations**



Shorelands and Environmental Assistance (SEA) Program  
**Guidance Outreach Assistance Team**

Thanks to:  
City of Sultan  
Adolfson Associates



## **Overview:**

- State Shoreline Management Act (SMA)
- Local Shoreline Master Program (SMP)
- GMA/SMA consistency
- SMP Development Process
  - Shoreline Characterization (inventory and assessment)

## **Sultan Case Study:**

- Shoreline characterization (jurisdiction scale)
- Watershed/adjacent lands assessment (landscape scale)

# Shoreline Management Act (SMA) of 1971

The SMA applies to all 39 counties and more than 200 cities:



- **marine waters** of the 15 coastal counties
- **fresh water streams** with > 20 cfs mean annual flow;
- **lakes** > 20 acres;
- upland shoreland areas extending 200 feet landward from waters edge; and
- associated wetlands

WA SMA requires that **local governments** develop *Shoreline Master Programs (SMPs)* to:

- protect ecological functions (*no net loss*)
- encourage public access
- support water-dependent development

**State Department of Ecology** advances the SMA goals by:

- providing assistance to local governments
- ensuring compliance with the policy and provisions of local SMPs

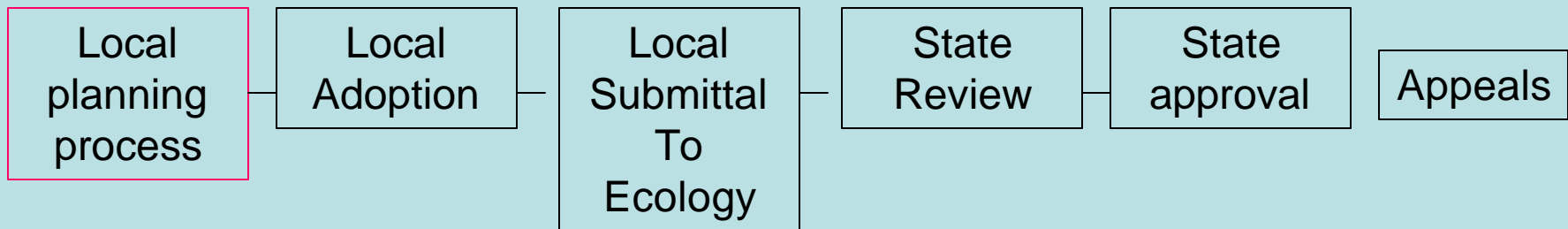
Development of SMP is a local/state cooperative effort.

## **A jurisdiction's SMP and Comprehensive Plan must be consistent:**

- State SMA policy is GMA's 14th goal
- Local SMPs policies are GMA policies
- Local SMP regulations are GMA development regulations

Integrating shoreline characterizations and critical areas assessment can help ensure consistency.

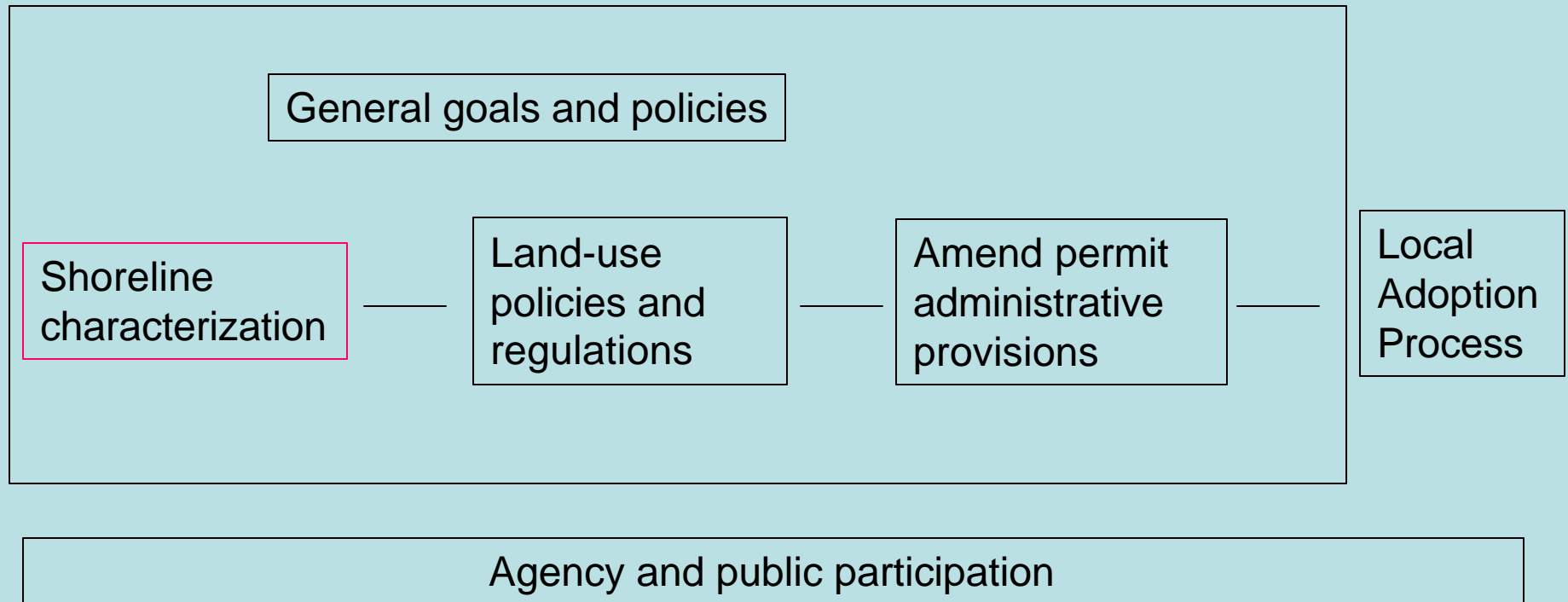
# SMP update process



Agency and public participation

*Ecology and local governments “shall not only invite but actively encourage participation...”*

# Local Planning Process





# Shoreline characterizations

*A well prepared Shoreline Characterization will :*

- Identify opportunities for:
  - protecting ecological functions (*no net loss*)
  - restoring degraded habitat (*rehabilitate*)
  - improving public access
  - supporting water-dependent use
- Provide information for assigning environment designations
- Help comply with GMA “best available science” requirement
- Reveal opportunities for coordinating with neighboring jurisdictions
- Baseline for adaptive management and cumulative impact assessment

# Shoreline Characterizations

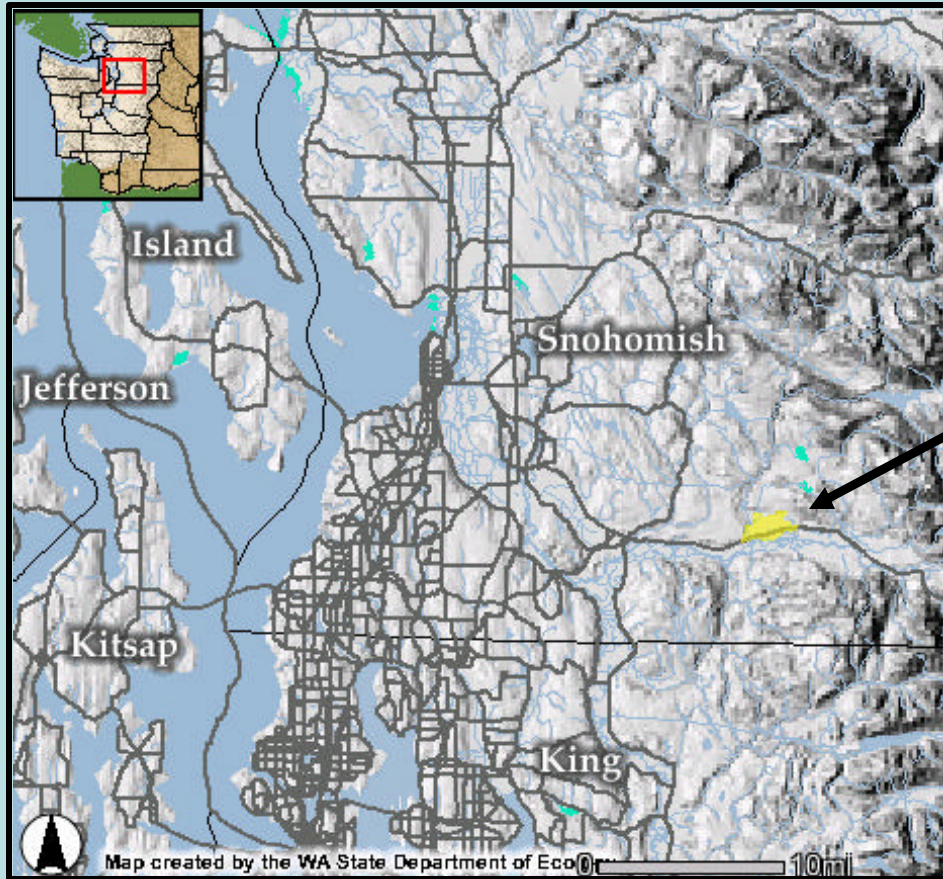
Ecology and local governments shall:

- Use a systematic interdisciplinary approach
- Consult with and obtain the comments of any federal, state, regional, or local agency having special expertise
- Consider all plans, studies, surveys, inventories
- Conduct or support such further research, studies, surveys, and interviews as are deemed necessary;
- Utilize all available information regarding hydrology, geography, topography, ecology, economics, and other pertinent data;
- Employ modern scientific data processing and computer techniques.

*Shoreline Management Act, RCW 90.58.100(6)*

# Case Study:

## Sultan shoreline characterization (jurisdiction scale)



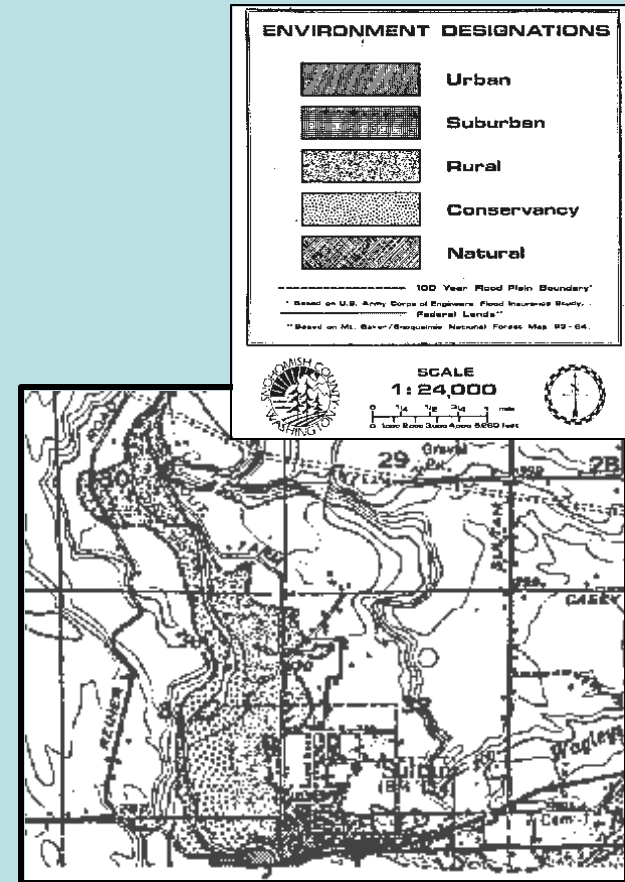
### **Sultan**

Small river city (*3 sq. miles*)  
in rural Snohomish Co.

5 miles of SMA Streams:  
Skykomish, Wallace and  
Sultan Rivers

# Status of Sultan's SMP update process

- City uses out-dated county SMP
- Updating comprehensive plan
- Goal is to adopt SMP next year
- Using planning commission meetings for public review of shoreline characterization



# Steps in Sultan's shoreline characterization

- Sultan applied to Ecology for Coastal Zone Management (CZM) grant
- Ecology met with city and newly contracted consultants to develop scope of work - decided on phased approach
- Ecology recommended primary data sources
- Sultan commences shoreline inventory and assessment

# Inventory:

Gather relevant studies, reports, EIS documents...

**WASHINGTON CONSERVATION  
COMMISSION**

**Salmonid Habitat  
Limiting Factors Analysis:  
Snohomish River Water Resource  
Inventory Area 7 – Final Report**

2002

**Snohomish River Basin  
Conditions and Issues  
Report**

Prepared for the Snohomish Basin  
Work Group

Pentect Environmental  
1999

**Washington Department of  
Fish and Wildlife**

**Salmonid and Steelhead  
Stock Inventory**

**EIS DOCUMENTS**

Draft Sultan Comprehensive Plan

EIS documents for projects

**COMPREHENSIVE  
FLOOD HAZARD  
MANAGEMENT PLAN**

CITY OF SULTAN

**Snohomish County  
SHORELINE MASTER  
PROGRAM**

**Adopted by ordinance for  
CITY OF SULTAN**



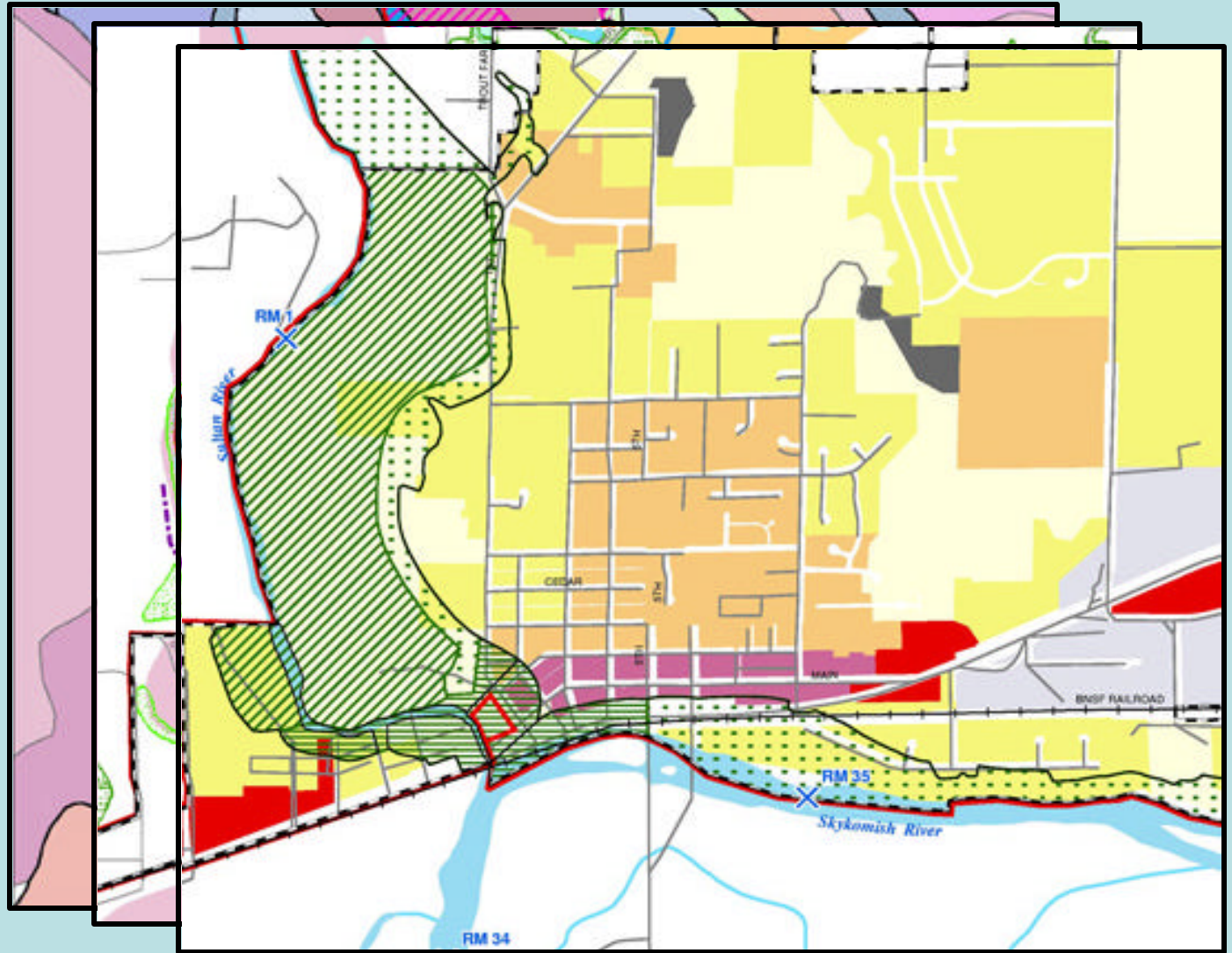
# ...core working maps...

Soils, geology,  
topography

Critical areas:

- Wetlands
- Slopes
- Floodplain
- listed species habitat

Zoning and  
existing SMP  
designations



# ...historic....



....and current photos



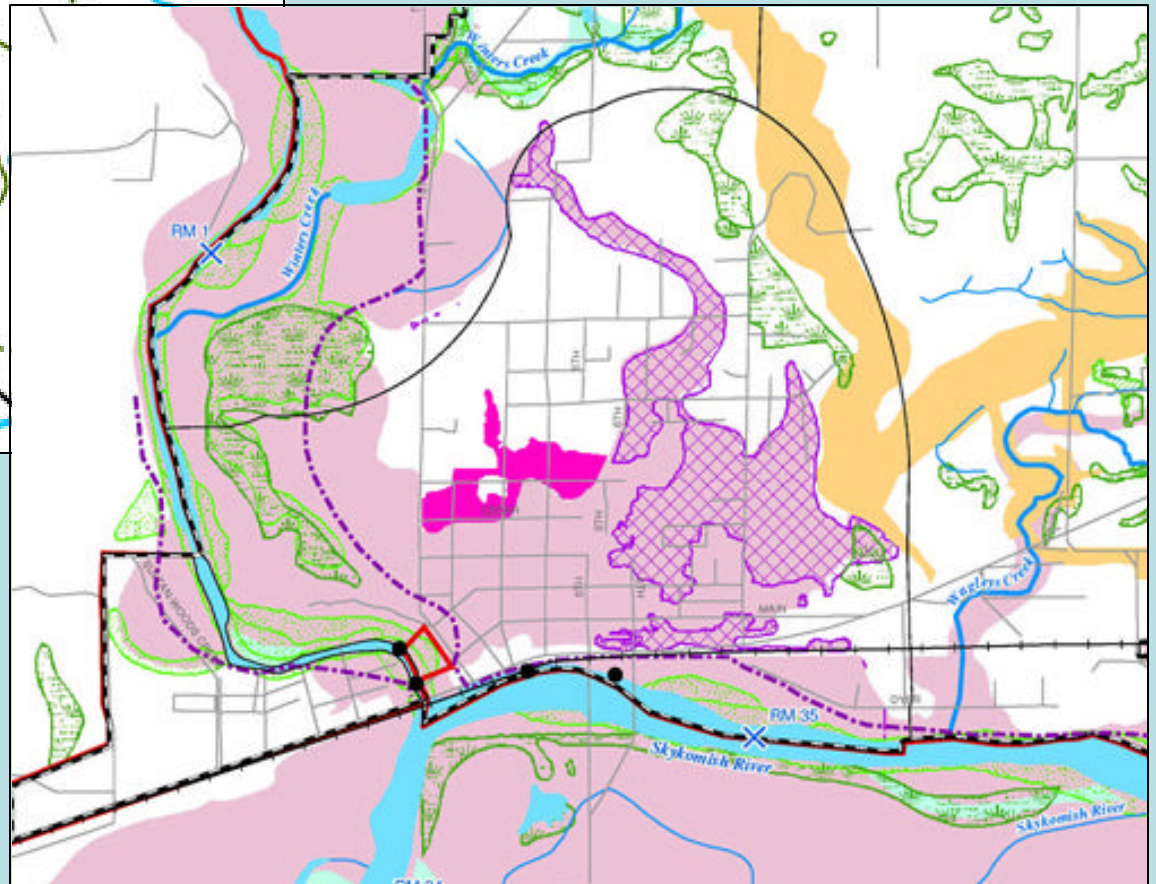
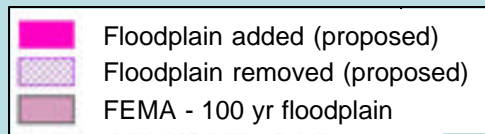
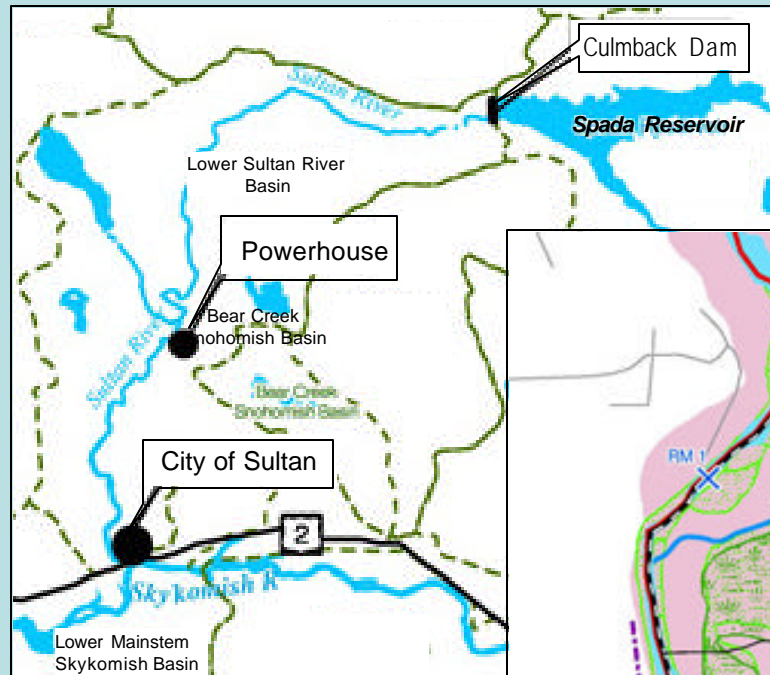
- *Inventory items* - core working maps, photos and relevant scientific literature used for analysis.
- 

- *Assessment products* - synthesize information that emerges from working maps, literature review and field visit. This includes map overlays developed to address planning issues specifically faced by this jurisdiction.

These maps become the city's final map portfolio to accompany the shoreline characterization report.

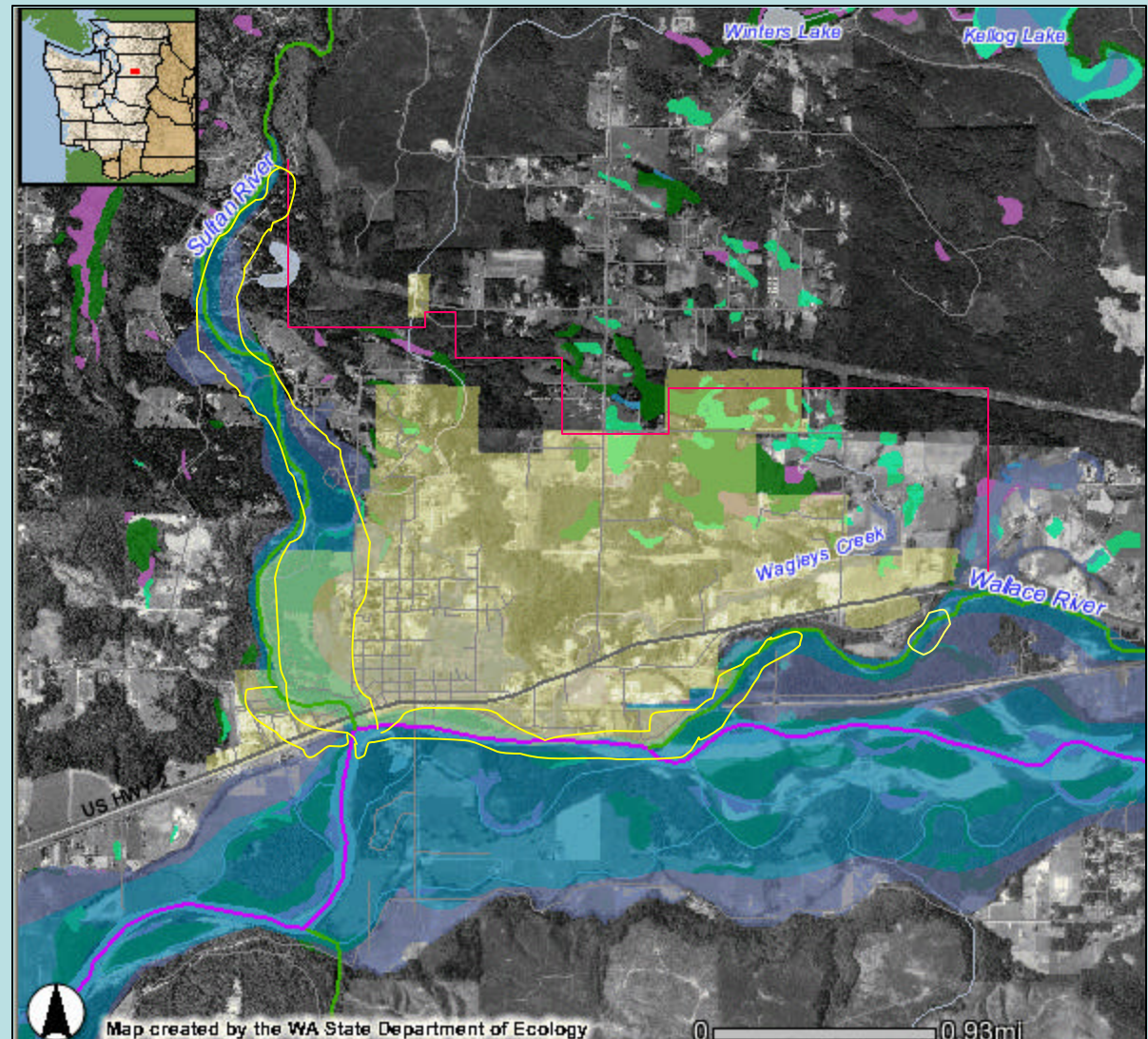
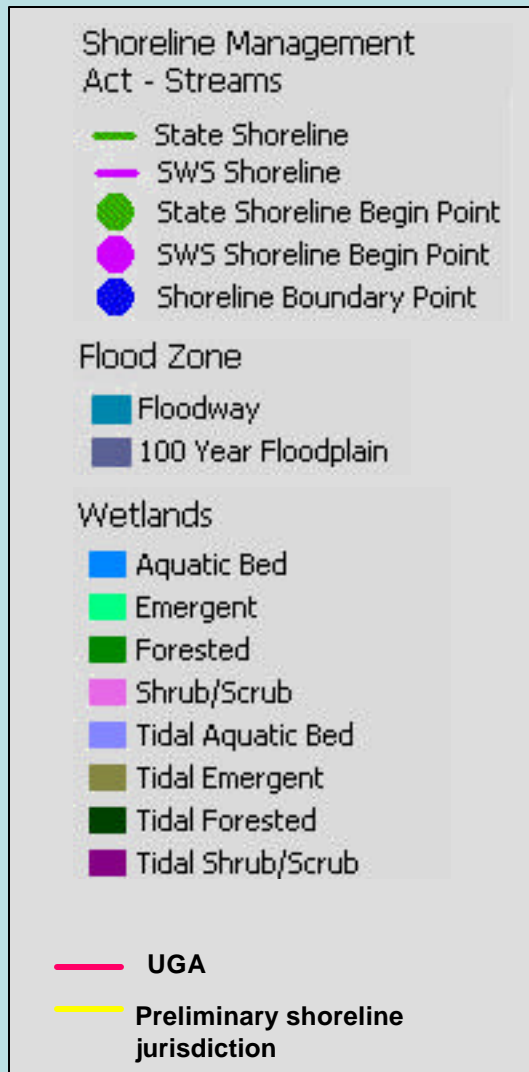
# Assessment:

First step; note the obvious



# Assessment:

## Map preliminary shoreline jurisdiction-



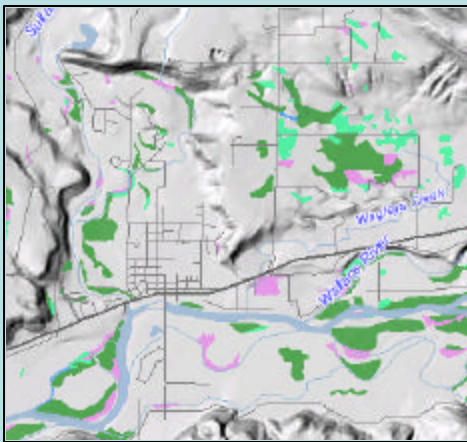


# Assessment:

Use all relevant information.

## Example: Sultan preliminary wetland mapping:

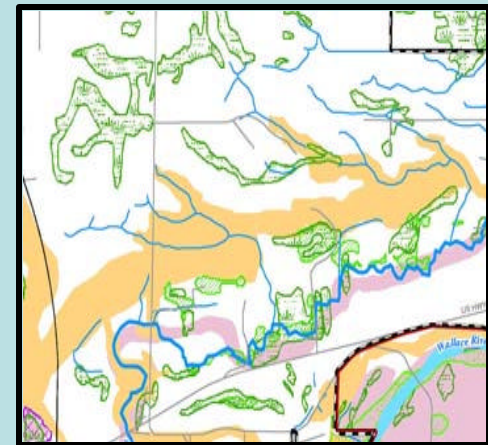
- Three sets of maps ranging from NWI to locally surveyed wetland delineations.
- Cross-comparison of wetland maps, hydric soils map and orthophoto to assess data layer accuracy.
- Document data sources and analysis methods for characterization report.



**NWI WETLAND**



**ORTHO PHOTO**



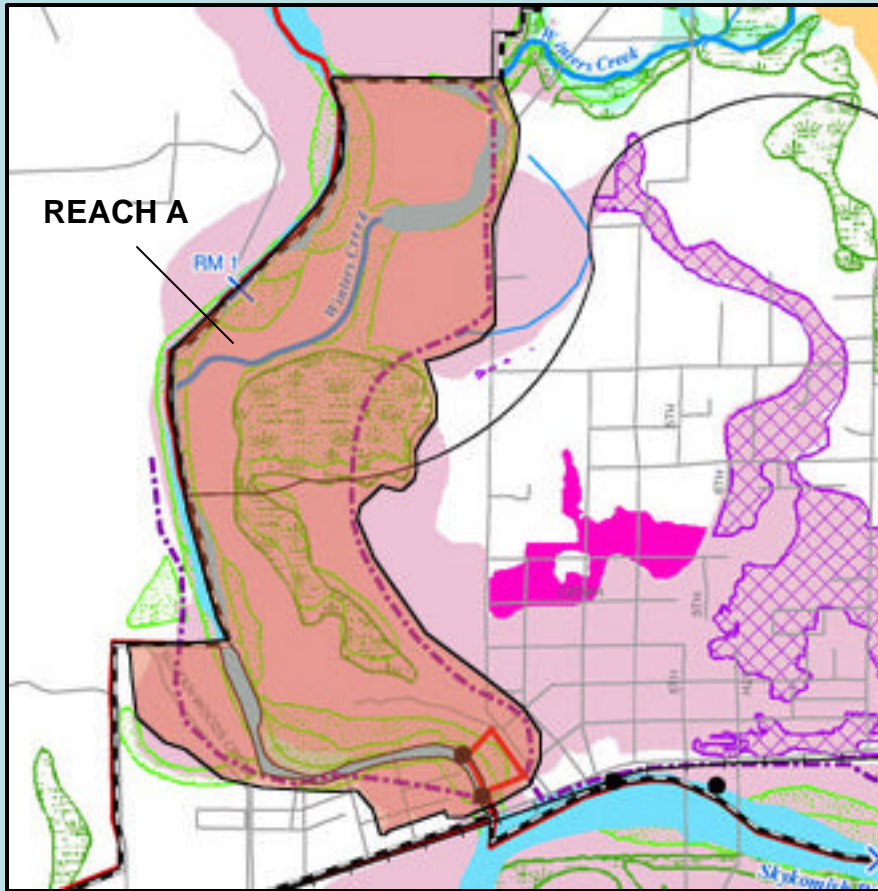
**LOCALLY SURVEYED WETLANDS**

## Divide shoreline into reaches :



- Use land use, zoning and ownership
- Confluence of streams and tributary input points
- City boundary versus UGA
- Width of riparian vegetation versus developed area along stream banks
- Document basis for separation into each reach for characterization report

## Map relevant layers



## Characterize each reach

- key land use issues
- primary planning characteristics (e.g. flooding, public access)
- critical ecological functions



# Field work -

Bring to the field:

- 1) Printed zoomed photos indicating preliminary reaches with zoning, wetlands, soils, and jurisdictional boundaries

- 2) List of identified data gaps

*Hydric soils  
indeterminate at North  
reach A*

*Check riparian density  
East reach C*

*Check possibility to  
extend public trail  
reach A*

*Potential wetlands in  
reach B along tributary*



# In the field:



Apply prior determined broad characterizations such as-

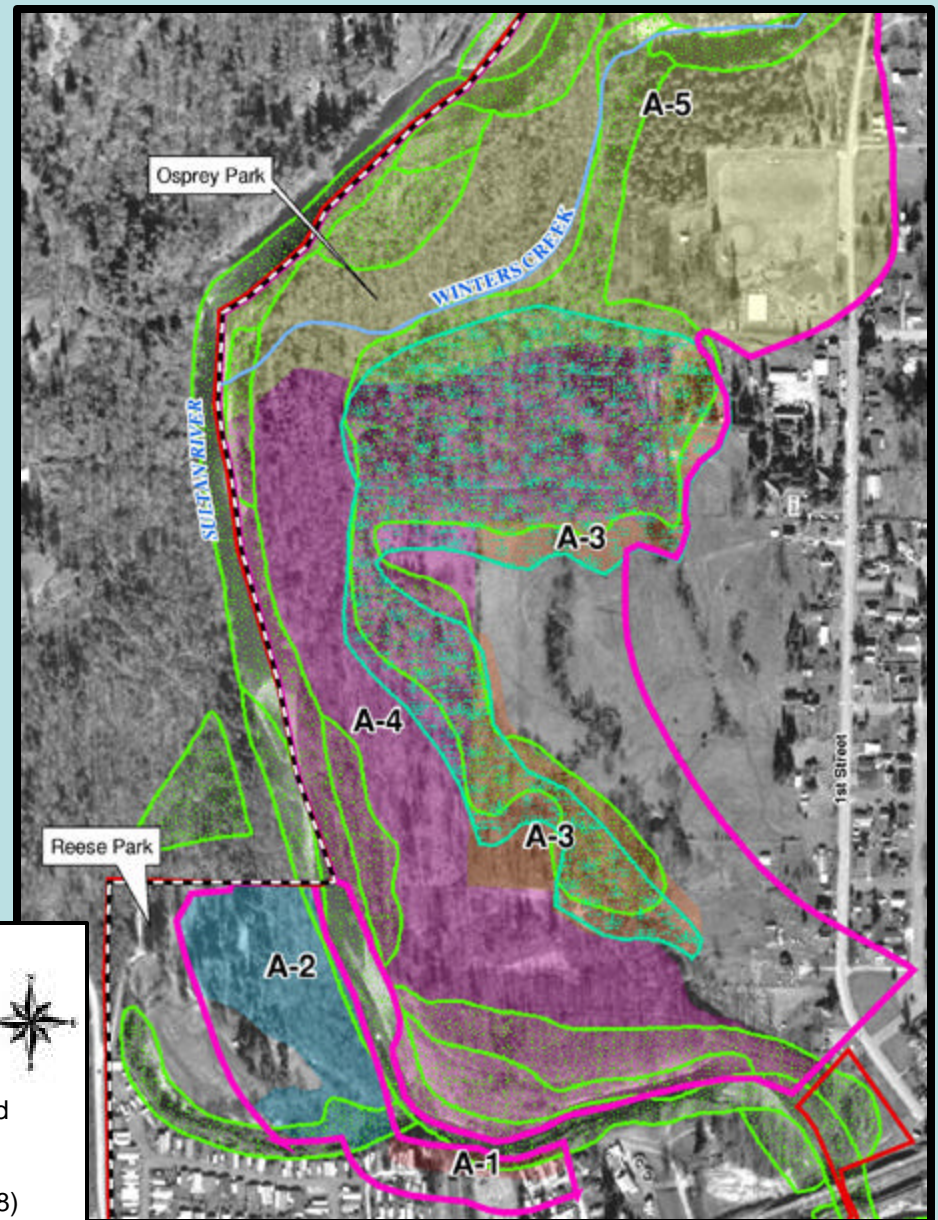
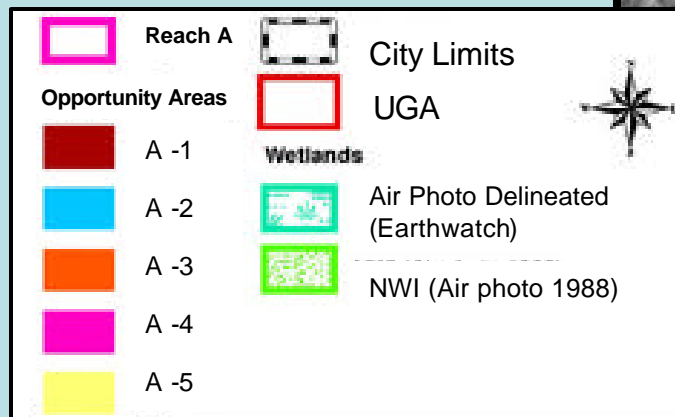
1. *mixed age deciduous/coniferous forest 50-200 feet wide*
2. *residential development to edge of shoreline;*
3. *bank armoring with no streamside cover;*
4. *narrow deciduous riparian fringe 5-20 feet wide;*
5. *unvegetated gravel bar;*
6. *wetland bench;*
7. *golf course etc.*





Integrate report findings, assessment maps, and field work to determine opportunity areas for:

- Protecting and restoring ecological function
- Improving public access
- Supporting water dependent uses

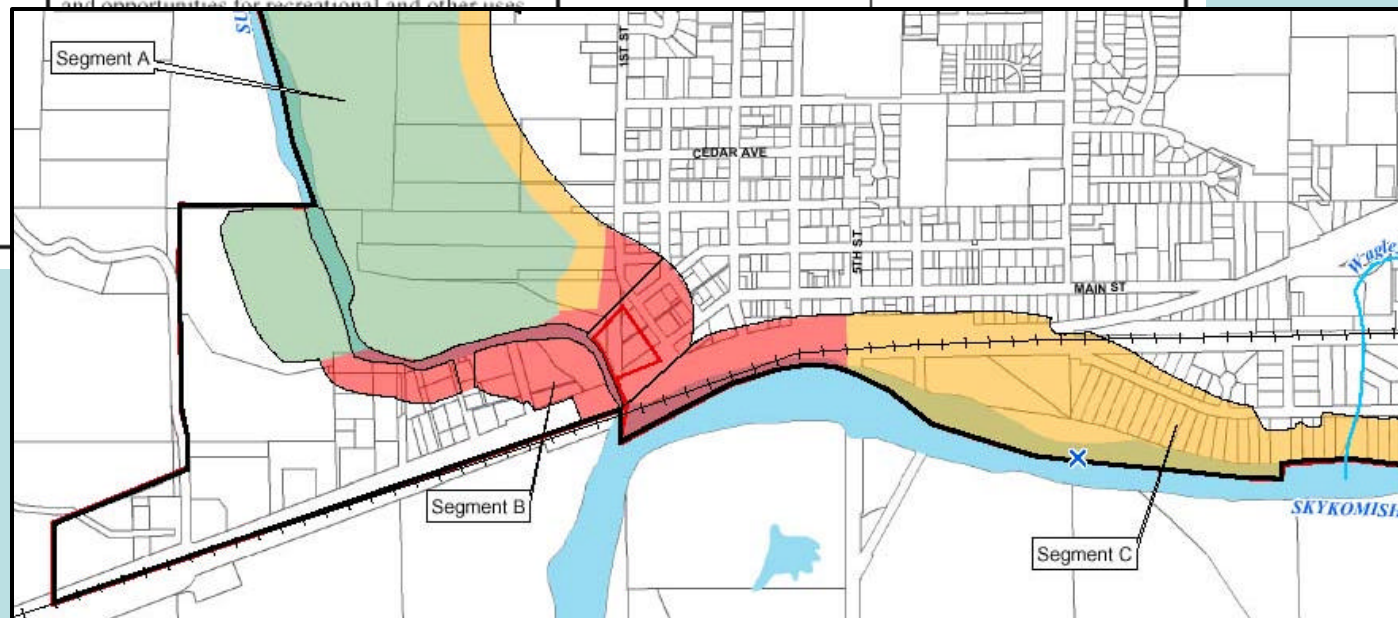


# Recommend new environment designations and document rationale.

Planning Segment	Existing Shoreline Environment Designation (Snohomish County SMP)	Intent or Purpose (Snohomish County SMP)	Preliminary Recommended Environment Designation	Rationale
A	Conservancy, Rural and Urban (east bank); Conservancy and Urban (west bank)	<p>Conservancy: The objective in designating a Conservancy Environment is to protect, conserve, enhance and manage existing natural resource areas and valuable historic and cultural areas. This should be done in a manner that will insure recreational benefits to the public, or achieve sustained resource utilization without substantial adverse modification of shorelines or topography.</p> <p>Rural: The objective of designating a Rural Environment is to protect agricultural land from urban expansion, restrict intensive development along undeveloped shorelines, function as a buffer between urban areas, and maintain open spaces and opportunities for recreational and other uses.</p>	<p>Natural</p> <p>Urban Conservancy</p> <p>Aquatic (portions of the Sultan River waterward of the ordinary high water mark)</p>	Segment A along the Sultan River consists of parks and open space, floodplain, and wetlands, with limited single-family residential development.

## Environment Designations

- Conservancy
- Rural
- Urban
- Planning Segment
- River Mile
- Watercourse



# Key points:

- Encourage Ecology and public participation early on.
- Shoreline characterization involves two parts - inventory and assessment.
- Note the obvious.
- Use all available, relevant information.
- Field work should follow inventory- mainly for data validation and addressing data gaps.
- The final shoreline characterization should integrate findings in an accessible manner. It will be used by the local citizenry to inform decisions about where they live.

## **Sultan Case Study:**

- ☒ Shoreline characterization (jurisdiction scale)
- Watershed/adjacent lands assessment (landscape scale)